Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Original) A holographic recording medium having a recording layer for recording an interference pattern between object light and reference light, characterized by

comprising a servo layer formed on a light incident side of the recording layer, having one of wavelength selectivity and incident angle selectivity each of which allows the object light and the reference light to pass through, and reflecting servo light having a wavelength different from those of the object light and the reference light or servo light having an incident angle different from those of the object light and the reference light, wherein one of servo information and address information is recorded on the servo layer.

2. (Original) The holographic recording medium according to claim 1, wherein the servo layer is constituted by any of a phase type reflection hologram, a dielectric multilayer film, and a dichroic mirror.

3. (Original) The holographic recording medium according to claim 1, wherein the servo layer is a phase type reflection hologram, comprises a planar diffraction grating having a constant grating space, and is designed so as to reflect the incident servo light satisfying the Bragg condition and to allow the object light and the reference light not satisfying the Bragg condition to pass through.

4. (Original) The holographic recording medium according to claim 1, wherein the servo layer is formed of a diffraction grating having a multilayer spheric shape and a constant grating space.

5. (Currently Amended) The holographic recording medium according to claim 3 ~~or 4~~, wherein: the servo layer is composed of a photosensitive material having a refractive index modulated by light irradiation; and the incident angle selectivity is imparted to the servo layer by setting a maximum refractive index modulation factor of the photosensitive material to 0.005 or more and 0.01 or less and a thickness of the servo layer to 5 μm or more and less than 20 μm.

6. (Currently Amended) The holographic recording medium according to claim 3 ~~or 4~~, wherein: the servo layer is composed of a photosensitive material having a refractive index modulated by light irradiation; and the wavelength selectivity is imparted to the servo layer by setting a maximum refractive index modulation factor of the photosensitive material to 0.0008 or more and 0.005 or less and a thickness of the servo layer to 20 μm or more and 100 μm or less.

7. (Original) A method for manufacturing a holographic recording medium, characterized by: allowing coherent plane wave laser light beams having the same wavelength to be vertically incident on both sides of a servo layer composed of a material capable of forming a reflection type diffraction grating by interference fringes of two laser light beams to thereby form, inside the servo layer, a planar diffraction grating having a constant grating space; and laminating the servo layer having the planar diffraction grating formed therein on a recording layer formed on a substrate via a spacer layer.

8. (Original) A method for manufacturing a holographic recording medium, characterized by: arranging a servo layer on both sides of an interference control mask with the interference control mask sandwiched therebetween, the servo layer composed of a material capable of forming a reflection type diffraction grating by interference fringes of two laser light beams; irradiating two laser light beams split by a beam splitter from both sides of a pair of the servo layers such that the interference control mask serves as a common focal point to thereby form in each of the servo layers a spheric diffraction grating in which the common focal point serves as the sphere center and the symmetry center; stripping both the servo layers from the interference control mask; and applying both the servo layers to a spacer layer of a laminate configured by laminating a substrate, a holographic recording layer, and the spacer layer in this order.

9. (Currently Amended) A holographic recording-reproducing optical system, comprising:

the holographic recording medium according to ~~any of claims 1 to 6~~ claim 1;

a servo optical system which branches off part of laser light by a beam splitter and forms servo light incident on the holographic recording medium at nearly right angles to the servo layer;

a polarizing beam splitter which splits the laser light branched off in a direction different from that of the servo light by the beam splitter into two linearly polarized light beams having orthogonal vibration planes;

a reference optical system which allows one of the linearly polarized light beams split by the polarizing beam splitter to be incident on the holographic recording medium as reference light from a direction different from that of the servo light;

an object optical system which allows the other of the linearly polarized light beams split by the polarizing beam splitter to be incident on the holographic recording medium as object light from a direction different from that of the servo light and the reference light; and

a photodetector which detects the reflection of the servo light from the servo layer, wherein:

the reference optical system comprises, in order from the polarizing beam splitter side, a 1/2 wave plate and a Fourier lens;

the object optical system comprises, in order from the polarizing beam splitter side, a spatial light modulator for modulating the linearly polarized light beam according to information to be recorded and a Fourier lens;

the servo optical system comprises, in order from the beam splitter side, a second polarizing beam splitter, a 1/4 wave plate, and a condensing lens;

the second polarizing beam splitter is designed so as to allow one of two linearly polarized light beams having orthogonal vibration planes to pass through and to reflect the other; and

the photodetector is provided on a reflection optical path which is formed when the reflection of the servo light from the servo layer is incident on the second polarizing beam splitter, the servo light being incident on the servo layer after passing through the second polarizing beam splitter.

10. (New) The holographic recording medium according to claim 4, wherein: the servo layer is composed of a photosensitive material having a refractive index modulated by light irradiation; and the incident angle selectivity is imparted to the servo layer by setting a maximum refractive index modulation factor of the photosensitive material to 0.005 or more and 0.01 or less and a thickness of the servo layer to 5 μm or more and less than 20 μm.

11. (New) The holographic recording medium according to claim 4, wherein: the servo layer is composed of a photosensitive material having a refractive index modulated by light irradiation; and the wavelength selectivity is imparted to the servo layer by setting a maximum refractive index modulation factor of the photosensitive material to 0.0008 or more and 0.005 or less and a thickness of the servo layer to 20 μm or more and 100 μm or less.

12. (New) A holographic recording-reproducing optical system, comprising:

the holographic recording medium according to claim 2;

a servo optical system which branches off part of laser light by a beam splitter and forms servo light incident on the holographic recording medium at nearly right angles to the servo layer;

a polarizing beam splitter which splits the laser light branched off in a direction different from that of the servo light by the beam splitter into two linearly polarized light beams having orthogonal vibration planes;

a reference optical system which allows one of the linearly polarized light beams split by the polarizing beam splitter to be incident on the holographic recording medium as reference light from a direction different from that of the servo light;

an object optical system which allows the other of the linearly polarized light beams split by the polarizing beam splitter to be incident on the holographic recording medium as object light from a direction different from that of the servo light and the reference light; and

a photodetector which detects the reflection of the servo light from the servo layer, wherein:

the reference optical system comprises, in order from the polarizing beam splitter side, a 1/2 wave plate and a Fourier lens;

the object optical system comprises, in order from the polarizing beam splitter side, a spatial light modulator for modulating the linearly polarized light beam according to information to be recorded and a Fourier lens;

the servo optical system comprises, in order from the beam splitter side, a second polarizing beam splitter, a 1/4 wave plate, and a condensing lens;

the second polarizing beam splitter is designed so as to allow one of two linearly polarized light beams having orthogonal vibration planes to pass through and to reflect the other; and

the photodetector is provided on a reflection optical path which is formed when the reflection of the servo light from the servo layer is incident on the second polarizing beam splitter, the servo light being incident on the servo layer after passing through the second polarizing beam splitter.

13. (New) A holographic recording-reproducing optical system, comprising:

the holographic recording medium according to claim 3;

a servo optical system which branches off part of laser light by a beam splitter and forms servo light incident on the holographic recording medium at nearly right angles to the servo layer;

a polarizing beam splitter which splits the laser light branched off in a direction different from that of the servo light by the beam splitter into two linearly polarized light beams having orthogonal vibration planes;

a reference optical system which allows one of the linearly polarized light beams split by the polarizing beam splitter to be incident on the holographic recording medium as reference light from a direction different from that of the servo light;

an object optical system which allows the other of the linearly polarized light beams split by the polarizing beam splitter to be incident on the holographic recording medium as object light from a direction different from that of the servo light and the reference light; and

a photodetector which detects the reflection of the servo light from the servo layer, wherein:

the reference optical system comprises, in order from the polarizing beam splitter side, a 1/2 wave plate and a Fourier lens;

the object optical system comprises, in order from the polarizing beam splitter side, a spatial light modulator for modulating the linearly polarized light beam according to information to be recorded and a Fourier lens;

the servo optical system comprises, in order from the beam splitter side, a second polarizing beam splitter, a 1/4 wave plate, and a condensing lens;

the second polarizing beam splitter is designed so as to allow one of two linearly polarized light beams having orthogonal vibration planes to pass through and to reflect the other; and

the photodetector is provided on a reflection optical path which is formed when the reflection of the servo light from the servo layer is incident on the second polarizing beam splitter, the servo light being incident on the servo layer after passing through the second polarizing beam splitter.

14. (New) A holographic recording-reproducing optical system, comprising:

the holographic recording medium according to claim 4;

a servo optical system which branches off part of laser light by a beam splitter and forms servo light incident on the holographic recording medium at nearly right angles to the servo layer;

a polarizing beam splitter which splits the laser light branched off in a direction different from that of the servo light by the beam splitter into two linearly polarized light beams having orthogonal vibration planes;

a reference optical system which allows one of the linearly polarized light beams split by the polarizing beam splitter to be incident on the holographic recording medium as reference light from a direction different from that of the servo light;

an object optical system which allows the other of the linearly polarized light beams split by the polarizing beam splitter to be incident on the holographic recording medium as object light from a direction different from that of the servo light and the reference light; and

a photodetector which detects the reflection of the servo light from the servo layer, wherein:

the reference optical system comprises, in order from the polarizing beam splitter side, a 1/2 wave plate and a Fourier lens;

the object optical system comprises, in order from the polarizing beam splitter side, a spatial light modulator for modulating the linearly polarized light beam according to information to be recorded and a Fourier lens;

the servo optical system comprises, in order from the beam splitter side, a second polarizing beam splitter, a 1/4 wave plate, and a condensing lens;

the second polarizing beam splitter is designed so as to allow one of two linearly polarized light beams having orthogonal vibration planes to pass through and to reflect the other; and

the photodetector is provided on a reflection optical path which is formed when the reflection of the servo light from the servo layer is incident on the second polarizing beam splitter, the servo light being incident on the servo layer after passing through the second polarizing beam splitter.

15. (New) A holographic recording-reproducing optical system, comprising:

the holographic recording medium according to claim 5;

a servo optical system which branches off part of laser light by a beam splitter and forms servo light incident on the holographic recording medium at nearly right angles to the servo layer;

a polarizing beam splitter which splits the laser light branched off in a direction different from that of the servo light by the beam splitter into two linearly polarized light beams having orthogonal vibration planes;

a reference optical system which allows one of the linearly polarized light beams split by the polarizing beam splitter to be incident on the holographic recording medium as reference light from a direction different from that of the servo light;

an object optical system which allows the other of the linearly polarized light beams split by the polarizing beam splitter to be incident on the holographic recording medium as object light from a direction different from that of the servo light and the reference light; and

a photodetector which detects the reflection of the servo light from the servo layer, wherein:

the reference optical system comprises, in order from the polarizing beam splitter side, a 1/2 wave plate and a Fourier lens;

the object optical system comprises, in order from the polarizing beam splitter side, a spatial light modulator for modulating the linearly polarized light beam according to information to be recorded and a Fourier lens;

the servo optical system comprises, in order from the beam splitter side, a second polarizing beam splitter, a 1/4 wave plate, and a condensing lens;

the second polarizing beam splitter is designed so as to allow one of two linearly polarized light beams having orthogonal vibration planes to pass through and to reflect the other; and

the photodetector is provided on a reflection optical path which is formed when the reflection of the servo light from the servo layer is incident on the second polarizing beam splitter, the servo light being incident on the servo layer after passing through the second polarizing beam splitter.

16. (New) A holographic recording-reproducing optical system, comprising:

the holographic recording medium according to claim 6;

a servo optical system which branches off part of laser light by a beam splitter and forms servo light incident on the holographic recording medium at nearly right angles to the servo layer;

a polarizing beam splitter which splits the laser light branched off in a direction different from that of the servo light by the beam splitter into two linearly polarized light beams having orthogonal vibration planes;

a reference optical system which allows one of the linearly polarized light beams split by the polarizing beam splitter to be incident on the holographic recording medium as reference light from a direction different from that of the servo light;

an object optical system which allows the other of the linearly polarized light beams split by the polarizing beam splitter to be incident on the holographic recording medium as object light from a direction different from that of the servo light and the reference light; and

a photodetector which detects the reflection of the servo light from the servo layer, wherein:

the reference optical system comprises, in order from the polarizing beam splitter side, a 1/2 wave plate and a Fourier lens;

the object optical system comprises, in order from the polarizing beam splitter side, a spatial light modulator for modulating the linearly polarized light beam according to information to be recorded and a Fourier lens;

the servo optical system comprises, in order from the beam splitter side, a second polarizing beam splitter, a 1/4 wave plate, and a condensing lens;

the second polarizing beam splitter is designed so as to allow one of two linearly polarized light beams having orthogonal vibration planes to pass through and to reflect the other; and

the photodetector is provided on a reflection optical path which is formed when the reflection of the servo light from the servo layer is incident on the second polarizing beam splitter, the servo light being incident on the servo layer after passing through the second polarizing beam splitter.